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Meeting Notes

Attendees: See Attached List

Date/Time: 11/20/01 5:00 to 7:00PM open house & 7:00PM Presentation

Project No.: 50885

Place: Windham Middle School

Re: Windham Public Informational Meeting

Notes taken by: Bruce A. Tasker

Jeff Brillhart opened the meeting and made introductions. He explained that this meeting is one of five Public Informational meetings being held by the Department in each of the communities along the study section of I-93 from Salem to Manchester. This meeting focuses what the Department has been doing for the last several months for the 18-mile study section of I-93 and more specifically the section of I-93 in Windham beginning at the Salem / Windham town line and running northerly to the Windham / Londonderry town line.

Jeff explained that the Department is charged with improving the capacity and safety this 18-mile section. He explained that in the Salem and Manchester areas, the highway currently carries over 110,000 vpd (vehicles per day) and 70,000 vpd, respectively. I-93 has a theoretical capacity to carry in the vicinity of 60,000vpd to 70,000 vpd. By 2020, the projected volumes are approximately 140,000 vpd in Salem and 85,000 vpd in Manchester. The highway is over capacity today. Given the volume of vehicles on the highway, and the narrow width of the highway, I-93 is less forgiving than it otherwise might be, and consequently less safe.

The Department is conducting the design and evaluation process using the format of the Environmental Impact Statement (EIS). The EIS follows five phases. The first phase or Scoping phase was completed in May 2000 with the publication of the Scoping Report. The second phase was completed in February of 2001 with the publication of the Rationale Report. The Rationale Report documents the evaluation and screening of various alternatives. The recommendations in the Rationale Report include the following:

- Consider widening I-93 to be three lanes in each direction the entire length.
- Consider widening I-93 to be four lanes in each direction the entire length.
- Consider widening I-93 to be four lanes south of Exit 3 and three lanes north of Exit 3 in both directions.
- Construct park and ride lots at Exits 2, 3, and 5, and enhance the Exit 4 Park and ride lot as appropriate.

- Expand existing bus service to Boston with stops at Exits 2, 3, and 5 as well as Exit 4.
- Enhance bus service by providing service between the NH park and ride lots and the industrial areas along I-93 in northern Massachusetts.
- Utilize Intelligent Transportation System Technology (ITS) and improve upon the Department's incident management capabilities.
- Incorporate TDM and TSM measures as practicable. The TSM would include short-term, localized improvements to address immediate safety concerns and capacity improvements where possible. TDM measures include initiatives to encourage motorists to carpool, use bus service, telecommute, and otherwise make fewer trips, and thus reduce demand on the highway.

The Rationale Report also suggested that the Department not pursue the following:

- Instituting rail service as part of this project at this point in time. Ridership for any rail service would not eliminate the need to widen the highway. However, the Report notes that rail service will in all likelihood be required in the future if NH is to maintain the level of mobility that is expected today. It is proposed that any widening of I-93 be done in such a manner as to retain the room for the possibility of a rail line in the highway corridor sometime in the future.
- Constructing high occupancy vehicle (HOV) lanes, as the ridership will not meet the threshold necessary to justify the lanes.

Currently the Department is in Phase III of the EIS development process. The DEIS document is scheduled to be available in March of 2002.

Other activities the Department is addressing include:

- A bike route or trail is being evaluated along I-93 corridor.
- Potential secondary impacts are being evaluated, which are different than direct impacts. Direct impacts are impacts to resources (i.e. wetlands, etc.) and properties, which are immediately related to the highway-widening footprint. Secondary impacts (which may happen as a result of making NH more accessible by widening the highway) occur when additional homes and businesses are developed creating it's own environmental impacts. To study these secondary impacts, the Department is utilizing an Expert Panel. The panel of experts in the fields of land use, development and economic issues are being asked to answer questions relative to what the growth in NH might be if I-93 is widened or not widened.
- Over the past year, the Department has been working with local safety (police and fire) agencies, State Police, and the FHWA to consider what steps might be taken to improve incident management capabilities; that is, addressing accidents along I-93 in a more timely manner to minimize delays and congestion. Some measures have been implemented and other will be added over the next year to improve the incident management capabilities before construction, during construction, and after construction is completed along the corridor.
- The Department is also pursuing mitigation sites along the corridor. One site in Salem is under construction and nearing completion; a second site in Londonderry is under design

and will be constructed next year. The Department is working with each of the communities along the corridor to identify additional sites that will be necessary to offset the highway widening impacts to the environmental resources.

Jeff provided an overview of public feedback heard from the various local meetings. That feedback focused on the need to:

- Begin widening construction as soon as possible.
- Minimize impacts to private properties.
- Construct sound barriers to screen and shield neighborhoods.

Jeff also noted that the public, in a broad sense, feels that a 4-lane widening should be done vs. the 3-lane widening, with the idea that a 3-lane widening would require additional widening soon after the 3-lane widening is complete.

The individual towns have also expressed their particular concerns relative to how the project affects their communities.

For Salem a primary issue has been that the project not exacerbate the flooding that occurs in the Town and within the Spickett River watershed today.

For Windham and Salem, a predominant issue has been the need to address water quality and highway runoff, especially with Canobie Lake and Cobbett's Pond located adjacent to the corridor.

Windham is also very much interested in ways to reduce the overall footprint of the highway and the Exit 3 interchange.

In Londonderry and Salem, the neighborhoods have expressed concern about the proposed park and ride lots and the impacts on their quality of life. Various alternatives or means of minimizing impacts are being considered.

Plan Presentation:

Tony Grande presented the concept plans, including a regional perspective overview plan and a typical roadway cross-section plan for the 4-lane option which includes four 12' travel lanes and 12' wide shoulders on the inside and outside of each barrel. Tony noted that space (ranging from 60' to 90') for a potential future rail line is also being reserved within the median. The bike trail is conceptually depicted at the toe of slope or top of bank along the outside of the corridor from Exit 2 to Exit 5.

Tony also described a 400-scale plan showing the entire project limits beginning at the MA / NH state line and proceeding north to the I-93 / I-293 split in Manchester. The 400-scale plan depicts a 4-lane option, but a 3-lane option is also available. Tony briefly presented the various interchange and mainline options for the entire project:

- Exit 1, two interchange options: rehabilitate existing interchange ramps with substandard geometry; or reconstruct the ramps to improve geometry.
- Exit 2, two interchange reconstruction options: diamond type interchange configuration; or diamond type configuration NB and loop configuration for the SB ramps.
- Exit 3, a range of options that include: (potentially nine choices) various combinations of improvements for I-93 mainline, NH 111, and the NB / SB ramps.

- Exit 4, two mainline options: easterly widening option that retains the existing SB ramps; or westerly widening option, which requires reconstruction of the SB ramps.
- Exit 5, three interchange options: diamond interchange configuration with NH 28 on-line; or diamond interchange configuration with NH 28 off-line to the east of I-93; or diamond interchange configuration SB with NB interchange ramps realigned opposite Liberty Drive.

Tony noted that space for a potential future rail corridor is also being considered as part of this project. The rail line would begin in Massachusetts, either connected to the existing Manchester to Lawrence rail line or perhaps connected to a new line that would follow I-93 in MA to the Woburn Transportation Center. Space for a rail corridor would be reserved in NH for either option. In NH the rail line begins along the west side of I-93 at the MA / NH state line and continues northerly until just north of Exit 1 where the rail line would cross into the median and continue inside the median, through Exit 5. North of Exit 5 the line would then be connected to the existing Manchester to Lawrence Branch to the west of I-93. This would provide the potential for future connection to the Manchester Airport or downtown Manchester.

In addition, three new Park and Ride facilities are being proposed as part of the I-93 corridor improvements with facilities planned at Exits 2, 3 and 5.

Tony then described the proposed 200 scale improvement plans and options for the I-93 corridor in the Windham area. The plans depict both 3-lane and 4-lane layout options for the I-93 mainline. The options for the Exit 3 area focus basically on three major components, which include the I-93 mainline, NH 111, and the NB and SB ramps.

Mainline Options:

Two mainline options were presented. The first, the NB shift option, involves predominately widening both the existing NB and SB barrels by holding the outside edges of the existing highway and widening toward the median to either 3- or 4-lanes. The exception to this widening methodology involves relocating a section of the NB barrel into the median beginning just north of NH 111-A and ending just north of NH 111 and relocating a section of the SB barrel into the median in the vicinity of NH 111. The NB barrel is relocated westerly approximately 500 feet to allow for more separation between a new NB off-ramp and the existing NH 111-A / NH 111 intersection. The SB barrel will be shifted easterly approximately 100 feet to allow for construction of a new I-93 bridge over NH 111 and addressed traffic control during construction.

A second option for the Exit 3 interchange was developed in response to the Town's request to look at reducing the I-93 footprint through the Town of Windham. This option is called the Tight Shift option, which shifts both the NB and SB barrels into the median area. The SB barrel is relocated approximately 150 feet east of the existing NH 111-A overpass and approximately 300 feet to the east of the existing SB barrel over NH 111 before transitioning back to the existing SB barrel to the north and south. The NB barrel shifts adjacent to the SB barrel beginning just north of the Brookdale Road bridge and ending approximately 0.5 miles south of the NB weigh station. Approximately 90 feet is held in the median between the two barrels to preserve space for a potential future rail line. This shift also allows the NB ramps to be shifted away from the NH 111 / NH 111-A intersection.

Sound walls are planned for both options. For the NB Shift option sound barriers are being considered along the NB barrel near South Shore Road and along Robin Hood Road. For the Tight Shift option sound barriers are still being considered along the NB barrel near South

Shore Road, however the relocation of the NB barrel away from the Robin Hood Road area would eliminate the need for the construction of a sound wall in this area.

NH 111 Options:

For NH 111, west of I-93, two options were identified:

The NH 111 Relocation option involves a segment of NH 111, mainly west of the SB barrel, that is relocated 400 to 500 feet north of existing NH 111. The new segment would be a 5-lane section extending to just west of the Wall Street intersection before transitioning to a 3-lane section and matching back into the existing roadway at the signalized intersection at the Village Green stores. The bypassed portion of existing NH 111 would serve as a frontage road and would be connected to relocated NH 111 at a signalized intersection opposite Wall Street. A turnaround at the easterly end would allow vehicles to reverse direction on the dead-ended portion of NH 111, just east of the Castleton drive.

The NH 111 On-line option involves upgrading and widening NH 111 to provide for a 5-lane section as necessary to manage the traffic in the area of the SB ramp intersection and then transition to a 3-lane section west of the Castleton drive. The 3-lane section would then extend west to the existing 3-lane section at the signalized intersection at the Village Green stores. A raised median island in the interchange area of the SB ramps would extend to Waters Edge Road precluding left turns to and from existing drives adjacent to the signalized intersection with the SB ramps. This layout would present operational problems due to congestion on NH 111 WB backing up into the interchange area prior to the design year of 2020 and would impact properties along both sides of NH 111.

SB Ramp Options:

The existing SB ramp configuration involves a loop ramp for SB traffic getting off I–93 and an adjacent slip ramp for SB traffic getting on I-93 from NH 111.

For the I-93 SB Ramps with NH 111 the proposed options would include:

In all cases for the I-93 SB off-ramp, traffic exiting to NH 111 would be accommodated by a standard (albeit long) diamond type ramp that intersects NH 111 at a signalized intersection.

In all cases for the NH 111 EB traffic that desires to travel SB on I-93, a free-flow option is proposed, where the EB traffic is provided a separate right turn lane along NH 111 before entering the SB on-ramp.

For the NH 111 WB traffic that wants to travel southerly onto I-93 there are two options under consideration.

The first option is a free-flow option, which can only be implemented with the NH 111 Relocation option for NH 111. The free-flow option involves a single lane free-flow loop ramp located in the NW quadrant of the Exit 3 interchange. The NH 111 WB traffic would exit NH 111 in a separate right turn lane then loop around and over NH 111. This traffic would merge with the NH 111 EB traffic prior to merging with the I-93 SB mainline through traffic.

The second option is a signalized double-left turn option for NH 111 WB to I-93 SB. This interchange configuration can be developed for both the NH 111 Relocation option and the NH 111 On-line option. The layout involves developing a signalized intersection along NH 111 where both the SB off and the SB on-ramps are located opposite each other. To access the SB ramp the NH 111 WB traffic would turn left from a double-left turn lane at a signalized intersection and merge to a single-lane ramp. This ramp, and the SB on-ramp for the NH 111 EB traffic, would then merge together south of NH 111-A and proceed southerly as a two lane on-ramp before merging with the I-93 SB mainline through traffic.

NB Ramp Options:

The existing NB ramp configuration involves a slip ramp for NB traffic getting off from I-93 and an adjacent loop ramp for NH 111 traffic getting on I-93 NB.

For the I-93 NB Ramps with NH 111 the proposed options would include:

For both the NB Shift and the Tight Shift options, the I-93 NB traffic exiting to NH 111 would use a diamond type two-lane off-ramp configuration connecting to a signalized intersection with NH 111.

For the Tight Shift option, the I-93 NB traffic from NH 111 would use a diamond type ramp configuration. To access the NB on-ramp, the NH 111 EB traffic would turn left from a turn lane at a signalized intersection on NH 111 and access the NB on-ramp. The NB on-ramp for NH 111 WB traffic utilizes a free-flow ramp just south of the proposed signalized intersection, in the NE quadrant of the interchange. This ramp, and the NB on-ramp for the NH 111 EB traffic, would then merge together and proceed northerly in one lane before merging with the I-93 NB traffic.

With the NB Shift layout, traffic could utilize free-flow on-ramps or the same configuration as the NB Shift diamond option. With the free flow layout, the NH 111 EB to I-93 NB on-ramp is configured as a single lane free-flow loop ramp in the SE quadrant of the interchange. With this layout, the I-93 NB on-ramp for NH 111 WB traffic also utilizes a free-flow ramp in the NE quadrant of the interchange. Both of the NB on-ramps are merged into one lane just north of NH 111 before merging with the I-93 NB mainline through traffic.

For the Park and Ride lots shown on the plans there are two locations because of the differences in the NB Shift and the Tight Shift options. With the NB Shift option, there is enough room within the median, south of NH 111, to provide for the Park and Ride. For the Tight Shift option, the park and ride is located to the east of the new NB barrel.

Tony noted that currently the Department feels that the preferred alternative based on the information at this time would be to: construct four lanes and would prefer the Tight Shift option along I-93; construct the diamond interchange option for both the NB and SB ramps at the Exit 3 interchange; and construct the NH 111 Relocation option.

Tony then described the tables and graphics provided as handouts which include: 1000 scale color plans of the various improvement options for the Tight Shift and the NB Shift options with a 4-lane widening of I-93, the NH 111 On-line and NH 111 Relocation options, and the loop ramp and diamond interchange options for the Exit 3 interchange. The handouts also include a summary matrix for both the 3-lane and 4-lane alternatives. The project was split into five segments reflecting the various options along the I-93 corridor. The matrix was developed to better

understand how one segment/option compares against another segment/option with respect to environmental and socio-economic impacts. The matrix can also be used to total the impacts for the entire corridor. Tony noted that the matrix is just a quick reference of impacts and cannot really tell the true story of each option without the supporting text, which will be included in the DEIS document.

Wetland Mitigation

Bill Barry explained that as part of the federal guidelines for projects like this the Department is required to mitigate impacts to wetlands. As such the process has begun to identify possible wetland mitigation sites to offset impacts resulting from the project improvements. Bill noted that the total number of wetland impacted for the project from Salem to Manchester is in the range of 55 to 70 acres. In the Town of Windham the wetland impacts range from 12 to 16 acres. Both the quantity and the quality of wetlands impacts needs to be identified. In Windham, the quality of the wetlands was identified, based on professional judgment, as 75% moderate quality and 25% high quality. Three major functions and values of the existing wetlands are identified which helps in determining the quality of the wetland. They include flood flow alteration (storage), water quality treatment function, and wildlife habitat.

As directed by the Resource agencies, the project must provide compensatory mitigation to compensate for the impacts. The mitigation is essentially made up of four forms:

- Wetland restoration, which in effect restores previously, filled wetlands.
- Enhanced wetlands, by planting different plants or by changing the hydrology.
- Wetland creation, which creates wetlands out of upland or dry land area.
- Preservation, which includes preserving existing wetland and an adjacent upland. Preservation is popular to the local communities because the property is preserved in perpetuity and managed by the community or some other environmental agency.

Bill described a handout identifying 37 potential mitigation sites of which perhaps a few will be selected to provide some types of compensatory mitigation for the project. Two sites of the 37 are already included in the Department's advance mitigation areas. Eight of the sites (6-preservation, 2-creation) are located in Windham. Bill explained that the locations need further evaluation and discussion with the communities and Resource Agencies as to which sites best serve the mitigation package. Bill noted that the process is flexible and welcomed input on the current list or the addition of other sites.

Jeff Brillhart noted that another round of meetings would be held in February and March with similar format to this one with the intent to further identify the Department's preferred alternative prior to the Public Hearing. The DEIS will be published some time in March. The Public Hearing is tentatively schedule for April or May of next year. The Final Environmental Impact Statement is scheduled for completion by the end of 2002. Construction is scheduled to begin in 2004.

Comments/Questions:

Comment:	Is there any possibility of adding another interchange between Exits 3 and 4?
Jeff Brillhart:	Derry and Londonderry are studying a new interchange north of Exit 4 called Exit 4A. If the Town of Windham wanted a new interchange then they

would have to follow a similar design and study process as the Exit 4A project. If the project were to be funded as part of the State's program the Town would need to approach the Rockingham Planning Commission to identify the need and get the project included as part of NH's 10-year highway planning process. As part of the Exit 4A study, interchanges south of Exit 4 in Derry were considered and making a connection to NH 28 was found to be extremely difficult.

Roger Hohenberger: Does the state require a 10 to 1 mitigation ratio for wetland impacts? Is the Department required to have pre- and post- runoff evaluations as part of the study process?

Jeff Brillhart: Ideally, the mitigation ratio is 1 to 1 assuming the mitigation site exactly replaces the functions and values of the impacted wetland. The actual ratio is generally the result of a negotiation process between the Resource Agencies, and the Department as to what seems to make the most sense for the project and the environment. Relative to runoff, the pavement runoff is typically collected and treated by the use of sedimentation basins or treatment swales or something similar. The drainage runoff volumes before and after the highway improvements are calculated, and the increase in runoff is then detained or retained to prevent increasing the rate of runoff for a particular drainage area. The water detained is generally metered out after the peak period of the storm event is over.

Comment: With the Tight Shift option, the wetland that is currently bisected by the NB barrel, just south of NH 111-A, would be connected as it once was. The culvert under I-93 SB barrel is higher than the wetland and consequently the water from the wetland is prevented from getting to Canobie Lake.

Jeff Brillhart: The idea of reconnecting the wetlands is one of the areas included as part of the 37 mitigation sites. The entire pavement and embankment would be removed and the wetland reconnected.

Tony Grande: The re-connection would be evaluated relative to using the existing NB barrel as part of the bike trail system. Some type of culvert/bridge would be needed to allow the trail to cross the wetland area.

Comment: I am in favor of shifting NH 111 away from Cobbetts Pond. Do you think that the relocation will improve the ability to treat the water before it gets to the lake?

Jeff Brillhart: Yes, I think that the relocation will allow better opportunities to treat the runoff as well as improve the traffic operations in the area. It should be noted that the water quality treatment basins involve property impacts, and constructing them along the existing NH 111 would be more difficult then along relocated NH 111.

Comment: Will the design-build approach expedite the schedule?

Jeff Brillhart: Yes that could possibly speed up the process once we get through the Environmental Impact Statement process and receive the necessary permitting. There was discussion about design build legislation in the past session. The cost is usually greater with the design-build process but the construction could be completed sooner.

Comment:	The Department seems to be endorsing the NH 111 Relocation option and that option would seem to improve the current condition, which has school buses stopping on NH 111 with all of the other traffic.
Jeff Brillhart:	Yes, that option would improve the safety of traffic entering and exiting driveways as well as reduce the need to stop the NH 111 traffic for school children thus improving safety.
Comment:	Will the Department provide information to the Town about the impact of the project on our tax base?
Jeff Brillhart:	Yes, that information will be identified as part of the Environmental Impact Statement. The effects of the various alternatives will be identified. There are both short-term and long-term effects that need to be considered. In the short-term certain businesses will be impacted, but perhaps in the long-term, with the improved highway, the area will redevelop more favorably.
Comment:	(Conservation Commission) We are supportive of the preservation mitigation in our town, supportive of water quality mitigation with respect to Canobie Lake and Cobbetts Pond, and also supportive of a biking trail. Will the existing rail corridor be considered as part of the bike trail system?
Jeff Brillhart:	A bike trail is being looked as part of the I-93 corridor from Exit 2 to Exit 5. Another project is looking at north/south bicycle routes between Concord and the Massachusetts border. This other study will include the existing rail corridor and options such as using portions of existing highways for bike routes.
Comment:	Anytime there is a lane drop there are backups and safety problems. I would like to see the four lanes carried to Manchester so the traffic can be safely moved through the Exit 3 area. I would like to see the free flow options constructed at Exit 3 to eliminate the need to stop the heavy traffic movement.
Jeff Brillhart:	From a transportation perspective we would agree with that, however we need to weigh all of the impacts.